

Amendments to the Specification

Please replace the paragraph beginning at page 2, line 13, with the following rewritten paragraph:

Fig. 1 illustrates a known OFDM transmission system 1. In the known system, for each period in which a symbol is to be transmitted, a digital complex symbol generator 2 generates a vector of digital complex symbols. The vector includes, e.g., one symbol per OFDM tone to be used. The vector of complex symbols are then transformed into a vector of complex time domain samples corresponding to a symbol period by a an Inverse Fourier transform operator 3, e.g., a an Inverse discrete or Inverse fast Fast Fourier transform Transform (IFFT) circuit. The time domain samples represent the discrete samples of the baseband signal to be transmitted during a symbol transmission period. This signal is essentially the sum of one or more sinusoid component signals, e.g., the OFDM tones. A single cyclic prefix is generated for the signal to be transmitted during a symbol transmission period. The cyclic prefix is added by the cyclic prefix generator 4 to the vector of time domain samples supplied by the Inverse Fourier transform operator 3. Generally, the cyclic prefix is usually a copy of the last few samples in the vector of the time domain samples and will therefore include all the OFDM signal's sinusoid components, e.g., tones. After the cyclic prefix is appended to the beginning of the samples supplied by the Inverse fourier transform operator 3, the signal samples pass through a filter 5. The filter 5 is used to limit out of band spectral emissions. The filtered samples are

then converted to an analog signal by a digital to analog converter 6. The analog signal is then mixed with the carrier frequency by mixer 7 to generate a passband signal. The passband signal is then power amplified by amplifier 8 and transmitted to a communication channel through a single antenna 9.